

# *SX 1650/2500 Recorder*

## SPECIFICATIONS

### **LED Display Accuracy** At 25 C.\*\*

- (a) For mV inputs (1 to 5000):  $\pm 0.15$  (1 + Suppression Ratio) % of span  $\pm 3$   $\mu$ V,  $\pm 1/2$  digit.  
For temperatures other than 25 C, add  $\pm$  (0.007% of span  $\pm 0.13$   $\mu$ V)/deg C deviation from 25 C.
- (b) For volt inputs with voltage divider: Add  $\pm 0.5\%$  of span to (a).
- (c) For thermocouple inputs: Add  $\pm 1/2$  C to (a). For temperatures other than 25 C add  $\pm$  (0.007% of span  $\pm 0.1$  C)/deg C deviation from 25 C.
- (d) For RTD inputs:  $\pm 0.15$  (1 + 0.67 Suppression Ratio) % of span  $\pm 0.003$  ohms,  $\pm 1/2$  C,  $\pm 1/2$  digit.  
For temperatures other than 25 C, add  $\pm$  (0.02% of span  $- 0.00013$  ohms)/deg C deviation from 25 C.

**Suppression Ratio** Low end of input divided by input span in V, mV or ohms.

**Pointer-Position Accuracy**  $\pm 0.20\%$  of full scale displayed span.

**Pointer-Position Deadband** 0.1% of full-scale span.

**Span Step-Response-Time** 1 second, nominal.

**Time Per Point** 5 seconds standard. Field-selectable from 1 to 180 seconds per point, in 1-second increments. Pointer position, LED display and alarms are updated each second.

**Chart Speed** Field-selectable from 1 to 240 in/hr, in 1 in/hr increments.

**Chart** Thermal sensitive (producing a blue record) time lines and calibration data are printed in red. 0 to 100 uniform chart supplied with each recorder is 36.5 m (40 yd) long.

**Temperature Limits** For rated operation: 15 C to 40 C (59 F to 104 F). For extreme operation:  $-9$  C to 50 C (16 F to 122 F). For storage:  $-40$  C to 70 C ( $-40$  F to 158 F).

**Relative Humidity Limits** 10% to 90% R.H., non-condensing.

**Common Mode Rejection** At power-line frequency, 80 dB (10000:1).

(dc + peak ac), whichever is less.

**Common Mode Voltage Limit** 100 V maximum, dc plus peak ac.

**Normal Mode (Transverse) Rejection** Equal to or greater than 60 dB at power-line frequency and above.

**Radio Frequency Interference (RFI)** No effect on performance specifications at a distance of 1 m (3.1 ft) from a 5 watt transmitter at 27 MHz, 150 MHz or 465 MHz.

**Power Requirements** 120 or 220 V, 50 or 60 Hz, 50 VA. Recorder is supplied for operation on 120 V, 60 Hz; line-voltage rating can be changed with a slide-switch on the rear terminal board, line-frequency rating with an internal switch. Internal on-off power switch and line fuse are standard.

**Case** 1650 Recorder: 13-1/2" W x 12-7/32" H x 14-3/4" D (343 x 310.4 x 374.7 mm). 2500 and 2500(RTD) Recorders: 16-27/32" W x 12-7/32" H x 14-3/4" D (427.8 x 310.4 x 374.7 mm).

**Case Color** Black

**Weight** 1650 Recorder: approximately 48 lb (21.8 kg). 2500 and 2500(RTD) Recorders: approximately 56 lb (25.4 kg).

**Servicing and Technical Manual** 277724.

**Operator's Manual** 277723.